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PRE-APPEAL BRIEF REQUEST FOR REVIEW

	Docket Number (Optional)
	LWS10004P00010US

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]	Application Number	Filed
	09/509,280	**March 20, 2000**

on **April 14, 2008**

Signature _Corinne Byk_

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Typed or printed name **Corinne Byk**

Art Unit	Examiner
2621	**Shawn S. An**

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☑ attorney or agent of record.
Registration number **32,273**

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

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April 14, 2008
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☑ *Total of **Four** forms are submitted.

STATEMENT FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Claims 1-7, 9, 10, 15, 16, 20, 22, 24-30, 33, 33, 38, 39, 43, 45, 47-53, 55, 56, 60-62, 65, 66, 68 and 100-117 are pending. A listing of these claims is in the response dated September 18, 2007. This numbering does not agree with the listing of claim numbers contained in the summary of the office action dated December 13, 2007.

The clear errors in the rejection relate to the improper interpretation of the meaning of various claim limitations and the continued attempt to read into Abecassis a teaching that is clearly not disclosed or suggested.

Rejections under 35 U.S.C. 101

The examiner has rejected claim 1 and all of its dependent claims and claim 105 as non-statutory subject matter merely because they "may be implemented as software, or a computer program, executing on the computer". In so doing, the examiner ignores the PTO's own Interim Guideline for Examination of Patent Applications for Patent Subject Matter Eligibility. All of the claims are limited to apparatus, methods and computer program products which produce, as output, an edited video production. It is submitted that no product of a computer system is ever more "useful, concrete and tangible" than this.

Claim 1 is directed to a system comprising computerized digital signal processing means which performs one or more algorithms implemented in software. Claim 1 is essentially an apparatus claim including functional limitations. This is clearly one of the enumerated categories of statutory subject matter in the guidelines. More particularly, the guidelines and ample case-law state that inventions which include computer programs are patentable, provided that they produce a "useful, concrete and tangible result". Such inventions are often expressed in terms of a programmed computer system. The examiner's test, by contrast, would mean that no programmed computer could possibly be patentable, which is obviously inconsistent with USPTO practice.

Similarly, independent claims 47 and 117 are rejected as non-statutory subject matter merely "since the Applicant identifies the computer program product as a signal". This is an inaccurate statement of the application and thus interpretation of the claims. The referenced passage in the specification describes how a program "...can be loaded into the computer system...", including via

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a transmission channel. Applicant does not identify the program product as a signal. Again, there is widespread acceptance that a computer program product is statutory subject matter. These claims do not cover a computer program product which does not include a tangible physical medium.

Rejections under 35 U.S.C. 112

Despite the long history of this application (including a previous request for pre-appeal review), the office action dated December 13, 2007, is the first to raise this rejection. The examiner had mentioned the possibility of this rejection being raised in a telephone call, on about November 27, 2007. In this call the examiner described the application as though Fig. 11 was not present. In an attempt to forestall the objection, the applicant provided extensive explanation of the tangible means referred to in the application text, particularly referring the examiner to Fig. 11, which can implement the "means" recited in claims 1 and 105. The clear error in this rejection includes ignoring the teaching of a computer system in the application.

Rejections under 35 U.S.C. 102 and 103

The claims are all rejected as anticipated or obvious over Abecassis U.S. Patent No. 6,067,401. The present invention is concerned with a computerized system, operated by a user. The system inputs video material, analyses it automatically to obtain the values of descriptors, selects segments of the input material based on the descriptor values, and assembles them into an output video production.

Abecassis is concerned with a system in which home users are supplied with a video product (e.g. CD) in which various pre-existing portions of the disc have been manually labeled with indications such as "profanity" or "violence". Neither of these indications is (or could be) obtained automatically. In fact, they were obtained by a human operator manually ascribing ratings to pre-defined segments of the video. The home user selects his preferences for levels of these indications, and accordingly his display system presents him with a production in which, for example, passages with too high a level of violence, and replaced with blander content. Abecassis thus enables censorship of inappropriate material.

With respect to independent claims 1, 24 and 47, and related dependent claims, Claim 1 requires: "computerized digital signal processing means for automatically performing one or more

digital signal processing algorithms implemented in computer software or hardware on visual data comprised in said input video material to derive at least one descriptor value for each of a plurality of first descriptors for each of a plurality of said segments of the input video material".

Abecassis, as noted above, discloses a manual procedure by which a human operator manually ascribes descriptors. It is clear error to allege that Abecassis discloses computerized digital signal processing means for **automatically** performing algorithms implemented in computer software or hardware to derive descriptor values. The examiner writes: "Note: default setting for a descriptor value assigned is always 1 or none, implying absence of an element". This says *nothing* about computerized digital signal processing to derive values **automatically**. A default value is not something obtained by performing a software algorithm on visual data. For this reason alone, the claim is clearly not anticipated by or obvious over Abecassis. Independent claims 24 and 47 have corresponding limitations, and are not anticipated by or obvious over Abecassis.

None of the descriptors obtained in Abecassis (profanity, violence, etc) can be derived automatically, as required by the present claim. The sorts of descriptor which can be obtained automatically (e.g. "colour histograms, audio spectrograms" etc, see page 16, final two lines of the present application) are not of interest to Abecassis. Therefore, Abecassis cannot possibly suggest the use of automatically derived descriptors.

Claims 1, 24 and 47 each include two further features that distinguish the claims from Abecassis. First, each specifies enabling a user to combine descriptor values of first descriptors in order to create descriptor values of at least one new descriptor. The Office action claims that this is disclosed in various locations of Abecassis. However, none of the locations disclose anything of the kind. The passages listed disclose that the human who performs the manual attribution of values has some flexibility to do so. It is **not** disclosed that he uses the values of some descriptors to set the values of others. The **automatic** creation of new descriptors using existing descriptors is alien to Abecassis, in which the creation of descriptors is a manual activity, performed by an expert. The descriptors are pre-selected (see Fig. 2A-2D) to represent fundamental properties of the movie. Therefore, there is no reason why anyone should combine these descriptors to form new descriptors (e.g. to form a single descriptor encoding both profanity and MPAA rating). The user of the system

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of Abecassis, who is a home user who receives a recording in which pre-existing segments have already been coded manually for descriptor values, is not an expert at generating new descriptors, and therefore could not possibly perform the creation of new descriptors mentioned in step (a). He would have no reason to. In the context of Abecassis, this step is not anticipated or obvious.

Secondly, each claim enables a user to rapidly create and view different output productions by applying different combinations of descriptors and selection rules. The office action refers here to Abecassis col. 10, lines 45-58. However, there is no disclosure of a user applying different combinations of descriptor and selection rules. Indeed, the immediately preceding lines of Abecassis (col. 10, lines 41-44) make it clear that this does not occur ("the preferences are established prior to transmission of the program to the receiver, so that during the transmission of the program viewer intervention is not required"). Nor, could such a user perform the recursive operation implied by claim 1, in which new output productions are created based on newly created descriptors. Nor would a user have any reason to do so. Nor would a reader of Abecassis ever conceive of giving the home-user this option. Therefore, in the context of Abecassis, the process implied in this step is also not anticipated or obvious.

As for claims 105, 111, and 117 (and claims dependent thereto), these claims were rejected in the Office action of November 2, 2006, as anticipated by Abecassis. After the pre-appeal brief request for review filed February 1, 2007, this rejection was withdrawn. It is not apparent why this rejected has been reintroduced.

As noted in the previous pre-appeal brief request, independent claim 105 specifies a system for creating an output video production from an input video signal comprising, among other limitations, means for obtaining at least two time series descriptors in the form of time series data, each of the time series descriptors representing the value of a characteristic of the input video signal at each of a series of successive time period. Means are provided for applying a descriptor reduction rule to at least a second one of the time series descriptors to obtain automatically at least one segment descriptor for each of the segments of the input video signal, or each segment descriptor having a single value for each respective segment of the input video signal. Means are provided for using a selection rule and descriptor values to select from among the plurality of video signals at least two

segments. Claim 111 is a method claim including limitations corresponding generally to those in system claim 105. Independent claim 117 specifies a computer program product including limitations generally similar to those in system claim 105.

The action continues to contend that Abecassis discloses at least two time series descriptors by referring to Fig. 2B, elements 230 and col. 8, lines 34-45. Line 230 in Fig. 2B simply indicates the possible descriptor values that can be used to represent time in a video. The values correspond to (1) no time characteristic, (2) minimal time characteristic, (3) expanded time characteristic and (4) extensive time characteristic. This is not a time series set of data, but rather a measure of time.

Further, Abecassis does not make obvious the replacement of manually generated descriptors to label pre-existing segments with time series descriptors which are subsequently used to derive segment boundary times. Moreover, as discussed above, Abecassis does not disclose or suggest obtaining automatically at least one segment descriptor value for each of the segments.

Thus, the Examiner's continued reliance on teachings not present in Abecassis to reject independent claims 105, 111 and 117 as anticipated is clear error. Applicant does not otherwise repeat the more detailed arguments presented in the prior amendments with respect to these claims.

In the "Response to Remarks", the examiner refers to MPEP 2144.04 III and re Venner, in relation to claims 105, 111 and 117, but this is simply not understood. Even if the output video product of the systems and methods defined by claims 105, 111 and 117 were indeed "the same" as in Abecassis (which they obviously are not; they will produce a completely different product), these claims recite particular algorithmic steps which have no counterpart steps in Abecassis. Their patentability is not precluded by MPEP 2144.04 III and re Venner, which merely say that claims must define how automation is achieved; this would be done in claims 105, 111 and 117, even if their output product were the same as Abecassis.

The examiner's objections to dependent claims are not addressed here (though they are respectfully traversed) since the claims are valid by virtue of their dependency.